AP Statistics Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Ch. 20 Classwork – One Prop Z-Test

1. A garden center wants to store leftover packets of vegetable seeds for sale the following spring, but the center is concerned that the seeds may not germinate at the same rate a year later. The manager finds a packet of last year’s green bean seeds and plants them as a test. Although the packet claims a germination rate of 92%, only 171 of 200 test seeds sprout. Is this evidence that the seeds have **lost** viability during a year in storage? If so complete a 95% confidence interval to show what the new germination rate should be.
2. In 2001 a national vital statistics report indicated that about 3% of all births produced twins. Is the rate of twin births the same among very young mothers? Data from a large city hospital found that only 8 sets of twins were born to 469 teenage girls. Test an appropriate hypothesis (is the percent DIFFERENT for young mothers) and state your conclusion.